US00D881285S

(12) United States Design Patent

Glenn et al.

(10) Patent No.: US D881,285 S
(45) Date of Patent: ** Apr. 14, 2020

(54) **GAMING MACHINE**

(71) Applicant: **BALLY GAMING, INC.**, Las Vegas, NV (US)

(72) Inventors: **Robert J. Glenn**, Chicago, IL (US); **Szymon K. Gluc**, Las Vegas, NV (US); **Paul M. Lesley**, Chicago, IL (US)

(73) Assignee: **SG GAMING, INC.**, Las Vegas, NV (US)

(**) Term: **15 Years**

(21) Appl. No.: **29/657,649**

(22) Filed: **Jul. 24, 2018**

(51) **LOC (12) Cl.** **21-03**

(52) **U.S. Cl.**
USPC **D21/369**

(58) **Field of Classification Search**
USPC ..... D21/369, 370, 371, 385, 329, 325, 394; D14/307, 172, 129, 325, 401, 371, 126, D14/439, 432, 450, 128, 375, 248, 374, D14/341, 138 G, 127; 463/28, 13, 11, 463/16, 20, 25, 31, 46, 23, 30, 17, 36, 29, 463/42, 34, 32, 35, 19, 21, 22; 273/292, 273/203, 138.2, 143 R, 142 R, 138.1; D19/60; D16/226; D8/335, 331, 334; D26/141; D7/641
CPC G07F 17/32; G07F 17/34; G07F 17/3211; G07F 17/3244; G07F 17/3267
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,661,954	A	12/1953	Koci
D236,720	S	9/1975	Baker
D238,379	S	1/1976	Miller
4,046,419	A	9/1977	Schmitt
D264,485	S	5/1982	Kitchen
4,372,557	A	2/1983	Del Principe et al.
4,373,725	A	2/1983	Ritchie

(Continued)

FOREIGN PATENT DOCUMENTS

EP	649 671	A1	4/1995
JP	03210172	B2	9/2001

(Continued)

OTHER PUBLICATIONS

AU Optronics Corp.; News Center. "AUO Announces Multiple Upcoming Innovations"; Oct. 27, 2008; retrieved from <http://www.auo.com/?sn=107&lang=en-US&c=10&n=363> on Mar. 3, 2017 (2 pages).

(Continued)

Primary Examiner — Ryan Harvey
(74) *Attorney, Agent, or Firm* — Banner & Witcoff, Ltd.

(57) **CLAIM**

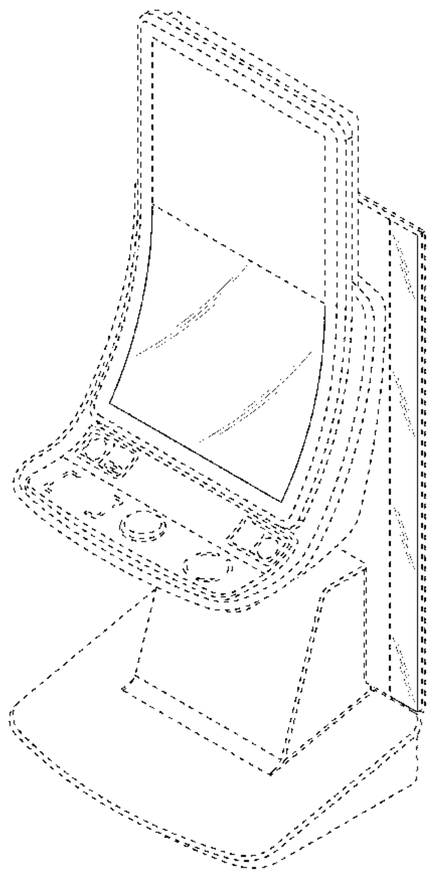
The ornamental design for a gaming machine, as shown and described.

DESCRIPTION

FIG. **1** is a front top right perspective view of a gaming machine showing our new design;
FIG. **2** is a front bottom left perspective view thereof;
FIG. **3** is a front view thereof;
FIG. **4** is a right side view thereof;
FIG. **5** is a left side view thereof; and,
FIG. **6** is a top view thereof.

The broken lines immediately adjacent to a shaded area define the bounds of the claimed design and form no part thereof. The broken lines depicting the remainder of the gaming machine show features that form no part of the claimed design. The curved oblique and oblique line shading shows that the surface is curved and is a transparent, translucent, highly polished or reflective surface.

1 Claim, 6 Drawing Sheets



(56) **References Cited**

U.S. PATENT DOCUMENTS

D275,772	S		10/1984	Akopian et al.
D280,835	S		10/1985	Berge et al.
D280,836	S		10/1985	Ludzia et al.
4,606,545	A		8/1986	Ritchie
4,705,274	A		11/1987	Lubeck
4,840,343	A		6/1989	Gasser
4,861,037	A		8/1989	Oursler
D307,771	S	*	5/1990	Cesaroni D21/370
4,930,117	A		5/1990	Huggins
4,981,298	A		1/1991	Lawlor et al.
D315,110	S		3/1991	Slater
5,015,189	A		5/1991	Wenzinger
D318,660	S		7/1991	Weber
5,074,558	A		12/1991	Bleich et al.
5,083,738	A		1/1992	Infanti
5,091,677	A		2/1992	Bleich et al.
5,102,192	A		4/1992	Barile, Sr.
5,110,120	A		5/1992	Smolucha
5,114,112	A		5/1992	Infanti
5,120,058	A		6/1992	Trudeau et al.
5,123,647	A		6/1992	Lawlor et al.
5,143,055	A		9/1992	Eakin
5,149,094	A		9/1992	Tastad
D333,164	S		2/1993	Kraft et al.
5,193,807	A		3/1993	Schilling et al.
5,195,746	A		3/1993	Boyd et al.
D335,150	S		4/1993	Biagi et al.
5,226,653	A		7/1993	Bil et al.
5,232,191	A		8/1993	Infanti
5,290,034	A		3/1994	Hineman
5,297,793	A		3/1994	DeMar et al.
5,316,303	A		5/1994	Trudeau et al.
5,322,283	A		6/1994	Ritchie et al.
5,326,104	A		7/1994	Pease et al.
5,350,174	A		9/1994	Ritchie et al.
D351,869	S		10/1994	Rothschild et al.
5,351,954	A		10/1994	Oursler et al.
5,357,104	A		10/1994	Bleich
5,358,241	A		10/1994	Anghelo et al.
5,358,242	A		10/1994	Trudeau et al.
5,358,243	A		10/1994	Eddy et al.
D352,738	S		11/1994	Anghelo et al.
5,383,663	A		1/1995	Anghelo et al.
5,405,144	A		4/1995	Ritchie et al.
5,409,296	A		4/1995	Barile
5,411,257	A		5/1995	Fulton
5,415,402	A		5/1995	Morrison et al.
5,415,403	A		5/1995	Ritchie et al.
5,417,423	A		5/1995	Oursler et al.
5,417,425	A		5/1995	Blumberg et al.
5,437,453	A		8/1995	Hineman
5,465,963	A		11/1995	Patla, Sr.
5,472,197	A		12/1995	Gwiasda et al.
5,494,286	A		2/1996	DeMar et al.
5,507,488	A		4/1996	Eddy et al.
5,511,783	A		4/1996	Popadiuk et al.
5,516,103	A		5/1996	Lawlor et al.
5,522,641	A		6/1996	Infanti
5,524,887	A		6/1996	Trudeau et al.
5,533,726	A		7/1996	Nordman et al.
5,542,748	A		8/1996	Barile
D376,391	S		12/1996	Okumura
5,580,052	A		12/1996	Popadiuk et al.
D378,604	S	*	3/1997	Brettschneider D21/370
5,632,482	A		5/1997	Anghelo
D380,014	S		6/1997	Yang
D381,700	S	*	7/1997	Brettschneider D21/370
5,655,965	A		8/1997	Takemoto et al.
5,664,777	A		9/1997	Nordman et al.
5,669,818	A		9/1997	Thorner et al.
5,678,886	A		10/1997	Infanti
D388,469	S	*	12/1997	Dickenson D21/325
5,697,612	A		12/1997	Piotrowski et al.
5,704,835	A		1/1998	Dietz, II
5,707,059	A		1/1998	Sullivan et al.
5,720,480	A		2/1998	Lawlor et al.
D395,463	S		6/1998	Scott et al.
5,762,617	A		6/1998	Infanti
5,791,731	A		8/1998	Infanti
5,806,851	A		9/1998	Gomez et al.
5,820,460	A		10/1998	Fulton
5,833,236	A		11/1998	Oursler et al.
D405,473	S		2/1999	Tikhonski et al.
D406,612	S	*	3/1999	Johnson D21/327
D407,759	S		4/1999	Isetani et al.
D408,366	S		4/1999	Popadiuk
5,890,715	A		4/1999	Gomez et al.
5,899,454	A		5/1999	Eddy et al.
5,924,690	A		7/1999	Kopera et al.
5,934,672	A		8/1999	Sines et al.
5,938,195	A		8/1999	Anghelo et al.
5,944,309	A		8/1999	Popadiuk et al.
D417,145	S		11/1999	McLaughlin
5,984,782	A		11/1999	Inoue
6,000,697	A		12/1999	Popadiuk et al.
D419,201	S		1/2000	de Haas
D419,606	S		1/2000	Toriyama
6,036,188	A		3/2000	Gomez et al.
6,047,962	A		4/2000	Popadiuk
6,047,963	A		4/2000	Pierce
D424,122	S	*	5/2000	Dickenson D21/325
6,071,190	A		6/2000	Weiss et al.
D428,062	S		7/2000	Hayashi
6,089,663	A		7/2000	Hill
D428,864	S	*	8/2000	Rooyakkers D14/306
6,102,394	A		8/2000	Wurz et al.
6,113,097	A		9/2000	Krutsch et al.
6,117,010	A		9/2000	Canterbury et al.
6,120,021	A		9/2000	Piotrowski et al.
6,129,353	A		10/2000	DeMar et al.
6,129,355	A		10/2000	Hahn et al.
6,135,449	A		10/2000	Cornell et al.
6,135,562	A		10/2000	Infanti
6,149,153	A		11/2000	Sheats, Jr.
6,155,565	A		12/2000	Gomez et al.
6,155,925	A		12/2000	Giobbi et al.
6,158,737	A		12/2000	Cornell et al.
6,159,098	A		12/2000	Slomiany et al.
6,164,644	A		12/2000	Cornell et al.
6,173,955	B1		1/2001	Perrie et al.
6,199,861	B1		3/2001	Hume et al.
D439,931	S		4/2001	Yamaguchi
6,210,279	B1		4/2001	Dickinson
6,224,482	B1		5/2001	Bennett
6,227,614	B1		5/2001	Rubin
6,227,970	B1		5/2001	Shimizu et al.
D443,313	S		6/2001	Brettschneider
D446,252	S		8/2001	Yamaguchi
6,283,546	B1		9/2001	Hill
6,290,229	B1		9/2001	Perez
D450,094	S		11/2001	Hedrick et al.
6,334,612	B1		1/2002	Wurz et al.
6,354,660	B1		3/2002	Friedrich
D459,402	S		6/2002	Wurz et al.
D460,915	S	*	7/2002	Lynch D21/329
6,422,670	B1		7/2002	Hedrick et al.
6,422,941	B1		7/2002	Thorner et al.
6,439,993	B1		8/2002	O'Halloran
D463,504	S		9/2002	Stephan
D464,377	S		10/2002	Wurz et al.
D465,813	S		11/2002	Randall
D466,160	S		11/2002	Hirato et al.
D467,977	S		12/2002	Gatto et al.
D468,364	S		1/2003	Beadell et al.
6,530,842	B1		3/2003	Wells et al.
6,530,872	B2		3/2003	Frehland et al.
6,572,187	B2		6/2003	Laufer
6,589,114	B2		7/2003	Rose
6,609,972	B2		8/2003	Seelig et al.
6,616,142	B2		9/2003	Adams
6,620,047	B1		9/2003	Alcorn et al.
D481,078	S		10/2003	Stephan
6,646,695	B1		11/2003	Gauselmann
6,652,378	B2		11/2003	Cannon et al.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D483,075	S	12/2003	Kang	
D484,548	S	12/2003	Franco Munoz et al.	
D485,583	S	1/2004	Porto	
6,695,697	B1 *	2/2004	Okada	G07F 17/32 273/143 R
6,715,756	B2	4/2004	Inoue	
6,729,618	B1	5/2004	Koenig et al.	
D492,363	S	6/2004	Seelig et al.	
D492,364	S	6/2004	Seelig et al.	
D492,365	S	6/2004	Munoz et al.	
D492,676	S *	7/2004	Monson	D14/306
D493,843	S	8/2004	Jackson, Sr. et al.	
D493,846	S	8/2004	Seelig et al.	
D495,754	S	9/2004	Wurz et al.	
D495,755	S *	9/2004	Wurz	D21/325
D496,407	S *	9/2004	Gadda	D21/325
D498,267	S	11/2004	Crouch	
D500,098	S	12/2004	Doi	
6,880,825	B2	4/2005	Seelig et al.	
D505,162	S	5/2005	Bristol et al.	
D508,268	S	8/2005	Hanchar et al.	
D508,269	S	8/2005	Wichinsky	
D508,719	S	8/2005	de Haas	
D508,961	S	8/2005	Gatto et al.	
D509,254	S	9/2005	Rasmussen et al.	
D509,255	S	9/2005	Bristol et al.	
D512,105	S	11/2005	Chitrapongse et al.	
D513,511	S	1/2006	Decombe	
D515,144	S	2/2006	Boyd	
6,997,810	B2	2/2006	Cole	
D520,504	S *	5/2006	Martin	D14/305
7,063,615	B2	6/2006	Alcorn et al.	
7,108,237	B2	9/2006	Gauselmann	
D531,677	S	11/2006	Mallory et al.	
7,184,277	B2	2/2007	Beirne	
D537,885	S	3/2007	Gadda et al.	
D539,854	S	4/2007	Luciano et al.	
D540,398	S	4/2007	Gadda et al.	
D546,893	S	7/2007	Yamashita	
7,247,098	B1	7/2007	Bradford et al.	
D548,801	S	8/2007	Groswirt	
D549,785	S	8/2007	Luciano, Jr. et al.	
7,267,612	B2	9/2007	Alcorn et al.	
D554,710	S	11/2007	Malone et al.	
D556,765	S	12/2007	Evans et al.	
D557,348	S *	12/2007	Gutknecht	D21/370
D557,748	S	12/2007	Jumper	
D559,328	S	1/2008	Rasmussen et al.	
D559,917	S	1/2008	Cole	
D560,724	S	1/2008	Johnson	
D560,725	S	1/2008	Johnson	
D563,326	S	3/2008	Patel et al.	
D563,481	S	3/2008	Looks et al.	
D564,600	S	3/2008	Greenberg et al.	
D564,601	S	3/2008	Strahinic et al.	
D566,197	S	4/2008	Greenberg et al.	
D569,863	S	5/2008	Feldstein et al.	
D572,314	S	7/2008	Vallejo et al.	
D578,168	S	10/2008	Looks et al.	
D581,983	S	12/2008	Bergstrom	
RE40,625	E	1/2009	Wurz et al.	
7,479,066	B2	1/2009	Emori	
D586,866	S *	2/2009	Hsu	D21/370
D587,272	S	2/2009	Morrow et al.	
D587,319	S	2/2009	Moises Deiab	
RE40,671	E	3/2009	Wurz et al.	
7,503,849	B2	3/2009	Hornik et al.	
D590,025	S	4/2009	Fiore	
D592,709	S *	5/2009	McComb	D21/370
D594,068	S	6/2009	Hsu	
D596,678	S *	7/2009	Myers	D21/370
D599,365	S	9/2009	Brown et al.	
D599,858	S	9/2009	Lesley et al.	
D599,859	S *	9/2009	Lesley	D21/370
D599,860	S	9/2009	Lesley et al.	
D601,637	S	10/2009	Myers et al.	
D601,638	S	10/2009	Palmisano	
D604,368	S	11/2009	Lesley et al.	
D605,189	S *	12/2009	Kuroda	D14/307
D605,231	S *	12/2009	Hashimoto	D21/325
7,628,693	B2	12/2009	Thomas	
7,666,085	B2	2/2010	Vorias et al.	
D612,432	S *	3/2010	De Viveiros Ortiz	D21/325
7,686,689	B2	3/2010	Thomas	
D613,802	S *	4/2010	Meyers	D21/370
D615,598	S	5/2010	McComb et al.	
D616,036	S *	5/2010	Cha	D21/325
D616,039	S *	5/2010	Bruzzese	D21/370
7,713,119	B2	5/2010	Pacey et al.	
D619,177	S *	7/2010	Lee	D21/325
D622,780	S	8/2010	Lesley et al.	
D622,781	S	8/2010	Lesley et al.	
D622,782	S	8/2010	Chudek et al.	
D623,621	S *	9/2010	Roed	D14/127
D624,604	S	9/2010	Wudtke	
D625,368	S	10/2010	Nelson et al.	
D626,182	S	10/2010	Cole et al.	
D626,183	S	10/2010	Cole et al.	
7,811,167	B2	10/2010	Giobbi et al.	
D631,060	S	1/2011	Flik et al.	
D631,100	S	1/2011	Palmisano	
D633,950	S	3/2011	Terpstra et al.	
D637,238	S	5/2011	O'Keene et al.	
D637,652	S	5/2011	Tahara et al.	
7,938,728	B2	5/2011	Vetter et al.	
7,955,176	B2	6/2011	Tastad et al.	
D641,047	S	7/2011	Tahara et al.	
7,976,393	B2	7/2011	Haga et al.	
7,985,139	B2	7/2011	Lind et al.	
8,002,424	B2	8/2011	Hwang et al.	
8,002,626	B2	8/2011	Englman	
D646,336	S	10/2011	Kelly et al.	
D646,337	S	10/2011	Kelly et al.	
D646,691	S	10/2011	Thai et al.	
D649,605	S	11/2011	Terpstra et al.	
D651,608	S	1/2012	Allen et al.	
8,152,623	B2	4/2012	Fiden	
8,162,740	B2	4/2012	Aoki	
8,216,061	B2	7/2012	Pacey	
8,267,764	B1	9/2012	Aoki et al.	
D669,076	S	10/2012	Haller	
8,292,451	B2	10/2012	Hwang et al.	
8,303,420	B2	11/2012	Chudek et al.	
8,305,743	B2	11/2012	Wu et al.	
8,323,114	B2	12/2012	Burak et al.	
D673,620	S	1/2013	Johnson et al.	
D673,621	S *	1/2013	Johnson	D21/369
D673,622	S	1/2013	Wudtke	
8,353,755	B2	1/2013	Vann et al.	
8,371,920	B2	2/2013	Gomez et al.	
8,371,927	B2	2/2013	Englman	
8,371,928	B2	2/2013	Englman et al.	
8,376,832	B2	2/2013	O'Connor et al.	
D677,736	S *	3/2013	Dorn	D21/370
D678,270	S *	3/2013	Song	D14/341
D678,955	S	3/2013	Lesley et al.	
D678,956	S	3/2013	Lesley et al.	
D678,957	S	3/2013	Cesaroni et al.	
D678,958	S	3/2013	Cesaroni et al.	
D681,130	S	4/2013	Lesley et al.	
8,430,756	B2	4/2013	McComb et al.	
D682,948	S	5/2013	Cesaroni et al.	
D684,637	S *	6/2013	Shelley	D21/370
D684,639	S *	6/2013	Shelley	D21/370
D685,033	S	6/2013	Wudtke	
D691,665	S	10/2013	Chudek	
D691,666	S	10/2013	Lesley et al.	
D693,343	S	11/2013	Haller	
D697,558	S *	1/2014	Myers	D21/325
D704,273	S	5/2014	Chudek	
D704,275	S *	5/2014	Lesley	D21/370
D705,872	S *	5/2014	Ortiz	D21/370
D706,359	S	6/2014	Wudtke	
D706,741	S	6/2014	Myers	

(56) **References Cited**

U.S. PATENT DOCUMENTS

D707,646	S *	6/2014	Kim	D14/138 G
D708,676	S *	7/2014	Ballman	D14/307
D712,975	S *	9/2014	Lesley	D21/369
D713,447	S *	9/2014	Balar	D18/4.6
D713,811	S *	9/2014	Isaacs	D14/138 AA
D714,269	S *	9/2014	Lee	D14/248
D714,270	S *	9/2014	Lee	D14/248
D714,271	S *	9/2014	Lee	D14/248
D714,392	S *	9/2014	Arabian	D21/369
D714,875	S	10/2014	Wudtke et al.	
D715,279	S *	10/2014	Lee	D14/248
D715,364	S	10/2014	Wudtke et al.	
D716,246	S *	10/2014	Yun	D14/138 R
D718,818	S *	12/2014	Sumii	D14/401
D719,615	S *	12/2014	Inoue	D21/370
D719,616	S *	12/2014	Inoue	D21/370
D721,767	S *	1/2015	Ferrazoli	D21/370
8,982,545	B2	3/2015	Kim et al.	
D726,139	S *	4/2015	Park	D14/138 R
D726,140	S *	4/2015	Park	D14/138 R
D726,678	S *	4/2015	Park	D14/138 R
D727,431	S *	4/2015	Themann	D21/370
D730,993	S *	6/2015	Castro	D21/370
D732,520	S *	6/2015	Themann	D14/307
D733,088	S *	6/2015	Garneau	D14/172
D736,751	S *	8/2015	Lee	D14/248
D736,752	S *	8/2015	Lee	D14/248
D740,887	S *	10/2015	Randazzo	D21/370
D740,888	S	10/2015	DePalma et al.	
D742,974	S *	11/2015	Lesley	D21/369
D742,975	S *	11/2015	Myers	D21/370
D747,763	S *	1/2016	Haller	D18/4.5
D752,573	S *	3/2016	Ballman	D14/307
D760,846	S *	7/2016	Castro	D21/370
D762,613	S *	8/2016	Garneau	D14/172
RE46,169	E	10/2016	Kelly et al.	
D770,449	S *	11/2016	Bae	D14/341
D770,450	S *	11/2016	Bae	D14/341
D770,998	S *	11/2016	Kwak	D14/138 AB
D771,628	S *	11/2016	Bae	D14/341
D776,112	S *	1/2017	Bae	D14/374
D786,859	S *	5/2017	Kim	D14/341
9,679,435	B2 *	6/2017	Schrementi	G07F 17/3213
D792,384	S *	7/2017	Kim	D14/248
D795,855	S *	8/2017	Kim	D14/248
D797,713	S *	9/2017	Kim	D14/248
D801,435	S *	10/2017	Themann	D21/369
D801,945	S *	11/2017	Cho	D14/138 G
D802,590	S *	11/2017	Bae	D14/374
D802,591	S *	11/2017	Bae	D14/374
D803,323	S *	11/2017	Bussey	D21/369
D803,324	S *	11/2017	Bussey	D21/370
D803,818	S *	11/2017	Kim	D14/248
D805,065	S *	12/2017	Taylor	D14/307
D806,159	S *	12/2017	Haller	D18/4.5
D808,354	S *	1/2018	Castro	D14/127
D808,467	S *	1/2018	Huang	D21/369
D809,068	S *	1/2018	Ballman	D21/369
D809,069	S *	1/2018	Ballman	D21/369
D811,384	S *	2/2018	Diasabeygunawardena	D14/336
D812,145	S *	3/2018	Huang	D21/369
D812,146	S *	3/2018	Castro	D21/369
D812,147	S	3/2018	Castro et al.	
D812,148	S *	3/2018	Castro	D21/369
D812,149	S	3/2018	Castro et al.	
D813,954	S	3/2018	Calhoun et al.	
D818,048	S *	5/2018	Calhoun	D21/369
D818,524	S *	5/2018	Dong	D18/4.4
D819,747	S *	6/2018	Castro	D21/369
D820,915	S	6/2018	Lee et al.	
D832,355	S *	10/2018	Castro	D21/369
D832,356	S *	10/2018	Castro	D21/369
D832,357	S *	10/2018	Castro	D21/369
D836,164	S *	12/2018	Castro	D21/369
D836,720	S *	12/2018	Kang	D19/113
10,181,236	B2 *	1/2019	Goldstein	G07F 17/3216
D842,929	S *	3/2019	Hung	D21/325
D842,930	S *	3/2019	Johnson	D21/369
D842,933	S *	3/2019	Castro	D21/396
D843,458	S *	3/2019	Castro	D21/369
D843,459	S *	3/2019	Castro	D21/369
D843,460	S *	3/2019	Castro	D21/369
D843,461	S *	3/2019	Castro	D21/369
D843,465	S *	3/2019	Castro	D21/369
D843,467	S *	3/2019	Johnson	D21/369
D843,468	S *	3/2019	Johnson	D21/369
D843,474	S *	3/2019	Lesley	D21/369
D843,475	S *	3/2019	Lesley	D21/369
D843,476	S *	3/2019	Lesley	D21/369
D843,477	S *	3/2019	Lesley	D21/369
D843,478	S *	3/2019	Lesley	D21/369
D843,479	S *	3/2019	Castro	D21/369
D843,480	S *	3/2019	Castro	D21/369
D843,482	S *	3/2019	Holland	D21/396
D843,866	S *	3/2019	Mutch	D10/87
D844,062	S *	3/2019	Lesley	D21/369
D849,149	S *	5/2019	Bussey	D21/369
D849,150	S *	5/2019	Gallagher	D21/369
D850,537	S *	6/2019	Urban	D21/370
10,325,446	B2 *	6/2019	Castro	G07F 17/322
D852,890	S *	7/2019	Ross	D21/370
D854,620	S *	7/2019	Yeh	D21/369
D854,621	S *	7/2019	Calhoun	D21/369
D858,641	S *	9/2019	Legras	D21/370
D858,642	S *	9/2019	Legras	D21/370
2002/0041069	A1	4/2002	Steelman	
2003/0122973	A1	7/2003	Huang	
2004/0018877	A1	1/2004	Tastad et al.	
2004/0029631	A1	2/2004	Duhamel	
2004/0053662	A1	3/2004	Pacey	
2005/0014547	A1	1/2005	Gomez et al.	
2006/0009284	A1	1/2006	Schwartz et al.	
2006/0028159	A1	2/2006	Otomo et al.	
2006/0034042	A1	2/2006	Hisano et al.	
2006/0079316	A1	4/2006	Flemming et al.	
2006/0131810	A1	6/2006	Nicely	
2006/0183553	A1	8/2006	Kiriyama et al.	
2006/0199638	A1	9/2006	Walker et al.	
2006/0287111	A1	12/2006	Mitchell et al.	
2008/0039213	A1	2/2008	Cornell et al.	
2008/0051202	A1	2/2008	Lube	
2009/0174996	A1	7/2009	Park	
2010/0053231	A1	3/2010	Park	
2012/0122569	A1	5/2012	Kowolik et al.	
2012/0168058	A1	7/2012	Kim et al.	
2013/0180653	A1	7/2013	Kim et al.	
2013/0278875	A1	10/2013	Kim et al.	
2014/0055696	A1	2/2014	Lee et al.	
2014/0092356	A1	4/2014	Ahn et al.	
2014/0176856	A1	6/2014	Lee et al.	
2014/0226111	A1	8/2014	Kim	
2014/0226112	A1	8/2014	Kim	
2014/0354938	A1	12/2014	Kim	
2014/0368782	A1	12/2014	Kim et al.	
2014/0375963	A1	12/2014	Bishop	
2015/0000823	A1	1/2015	Kim et al.	
2015/0001291	A1 *	1/2015	Govindarajan	G06Q 20/208 235/380
2015/0036073	A1	2/2015	Im et al.	
2015/0087403	A1 *	3/2015	Castro	G07F 17/3209 463/25
2015/0116621	A1	4/2015	Park et al.	
2015/0116625	A1	4/2015	Hwang et al.	
2015/0301390	A1	10/2015	Kim	
2016/0070964	A1 *	3/2016	Conrad	G07G 1/0018 348/150
2018/0078854	A1 *	3/2018	Achmueller	A63F 13/20
2019/0080547	A1 *	3/2019	Urban	G07F 17/322

FOREIGN PATENT DOCUMENTS

KR	10-1113734 B1	2/2012
KR	10-2012-0051630	5/2012

(56) **References Cited**

FOREIGN PATENT DOCUMENTS

KR	10-1268471	B1	6/2013
KR	10-1278904	B1	6/2013
KR	10-1336677	B1	12/2013
KR	10-1381609	B1	4/2014
KR	10-1381610	B1	4/2014
KR	10-2015-0013987		2/2015
KR	10-1539221	B1	7/2015
TW	200949775	A	12/2009

OTHER PUBLICATIONS

Brochure for "Virtual Pinball," Tab-Austria, 2007 (8 pages).
Cabinet Brochure for Hydako Co., date estimated as early as 2009 (1 page).
Catalog for "Your Partner Innovation," Bally Technologies, date estimated as early as 2011 (4 pages).
Catalog for Atronice®-Spielo®, date estimated as early as 2008 (2 pages).
Cohran; "Why Samsung's curved-screen TV might be a 'game changer'"; CBS News; Aug. 14, 2013; retrieved from <http://www.cbsnews.com/news/why-samsungs-curved-screen-tv-might-be-a-game-changer/> (3 pages).
DailyTech; "AUO Shows Off Curved Display and Touch Screen"; May 23, 2008; retrieved from <http://www.dailytech.com/AUO+Shows+Off+Curved+Display+and+Touch+Screen+Tech/article11845.htm> on Mar. 3, 2017 (2 pages).
Daniel; "Curved Monitors—Overview"; Cruved Monitor Test; Aug. 28, 2015; retrieved from <http;//wwww.curved-monitor-test.de/> (5 pages).
Denison; "Why can't you buy a flat OLED yet? The curve isn't just about viewing experience"; Digital Trends; Aug. 18, 2013; retrieved from <http://www.digitaltrends.com/home-theater-why-did-the-us-get-stuck-with-curved-oled/#!zXypT> (8 pages).
DigiTimes Inc.; "FPD China 2009: AUO 8.9-inch convex display panel"; Mar. 12, 2009; retrieved from <http://www.digitimes.com/photogallery/showphoto.asp?ID=3376> on Mar. 3, 2017 (3 pages).
Fall & Winter Catalog for Aristocrat, date estimated as early as 2010-2011 (7 pages).
Gizmodo.com; "AUO Curved Displays, Ultra Thin LCDs on the Way"; May 20, 2008; retrieved from <http://gizmodo.com/392248/auo-curved-displays-ultra-thin-lcds-on-the-way> on Mar. 3, 2017 (2 pages).
Immersaview; "Why choose a Curved Screen for your Multi-Projector Setup"; Jan. 28, 2016; retrieved from <https://www.immersaview.com/resources/why-curved/> (7 pages).
Kelly; "TV trends at CES: 4K, curves and smart TVs"; CNN; Jan. 8, 2014; retrieved from <http://www.cnn.com/2014/01/07/tech/gaming-gadgets/ces-television-trends/> (5 pages).
Ljt216; "Flat Screen vs Curved CRTs for Retro Games"; Reddit; Jul. 29, 2015; retrieved from <https://www.reddit.com/r/gamecollecting/comments/3f25r0/flat_screen_vs_curved_crts_for_retro_games/> (4 pages).
Manjoo; "TV Makers Are Out of Ideas"; Wall Street Journal; Jan. 8, 2014; retrieved from <https://www.wsj.com/news/articles/SB10001424052702303393804579030880101223079 2> (4 pages).
Matthias; "Curved TV—Overview"; Curved TV Test; Apr. 20, 2016; retrieved from <http://technikblog.net/fernseher-test/curved-tv/> (16 pages, in German).
Morrison; "Curved OLED HDTV screens are a bad idea (for now)"; CNET; Jun. 18, 2013; reetreived from <https://www.cnet.com/news/curved-oled-hdtv-screens-are-a-bad-idea-for-now/> (9 pages).
NewLaunches.com; "LG Phillips LCD develops world's highest resolution 14.3-inch flexible color E-paper display!"; Jan. 3, 2008; retrieved from <http://newlaunches.com/archives/lgphillips_lcd_develops_worlds_highest_resolution_143inch_flexible_color_epaper_display.php> (4 pages).
OLED-Info; "LG Phillips LCD Develops 14.3-Inch Color E-Paper Display"; Jan. 4, 2008; retrieved from <http://www.oled-info.com/lg/lg_philips_lcd_develops_14_3_inch_color_e_paper_display>; (2 pages).
PC World; "AU Optronics Shows off Curved LCD Screen"; May 20, 2008; retrieved from <http://www.pcworld.com/article/146083/article.amp.html> on Mar. 3, 2017 (3 pages).
Photonics industry and Technology Development Association (PIDA); "E-Paper Shows Potential at Creating a Paperless Haven"; OptoLink Magazine, 3 Quarter 2008; pp. 8-11 (4 pages).
Product Catalog for "Alpha Elite™," Bally Technologies, date estimated as early as 2008-2009 (2 pages).
Product Catalog for Ainsworth Game Technology Ltd, date estimated as early as 2007 (6 pages).
Product Catalog for Bally Technologies, date estimated as early as 2010 (2 pages).
Product Sheet for "3RV™," WMS Gaming In., 2002 or earlier (2 pages).
Product Sheet for "American Eagle," Eagle Co. Ltd., 1997 (2 pages).
Product Sheet for "American Eagle," Eagle Co., Ltd., 2000 (2 pages).
Product Sheet for "EVO™ Hybrid," Bally Gaming Systems, 2002 (4 pages).
Product Sheet for "Miss America," AC Coin & Slot, 2002 or earlier (2 pages).
Product Sheet for "Monopoly Chairman of the Board™," WMS Gaming Inc., 1999 (2 pages).
Product Sheet for "ProSLOT® 6000," Bally Gaming Systems, 2002 (4 pages).
Product Sheet for "Survivor," WMS Gaming Inc., 2001 (4 pages).
Product Sheet for "Ultrapin™," Global VR, 2007 (1 pages).
Snider; "Sony tosses latest pitch for curved TV displays"; USA Today; Oct. 15, 2013; retrieved from <http://www.usatoday.com/story/tech/personal/2013/10/15/new-curved-sony-led-hdtv/2982051/> (2 pages).
Wilcox; "LG, Samsung, and Sony throw TV buyers a curve"; Consumer Reports; Sep. 10, 2013; retrieved from <http://www.consumerreports.org/cro/news/2013/09/curved-tv-screens/index.htm#> (1 page).
Wood, M., Major, C., Carr, V. eds.; "Curved Screens: Worth It?" video found at <http://www.nytimes.com/video/technology/personaltech/100000002788325/curved-screens-worth-it.html; New York Times; Mar. 26, 2014.

* cited by examiner

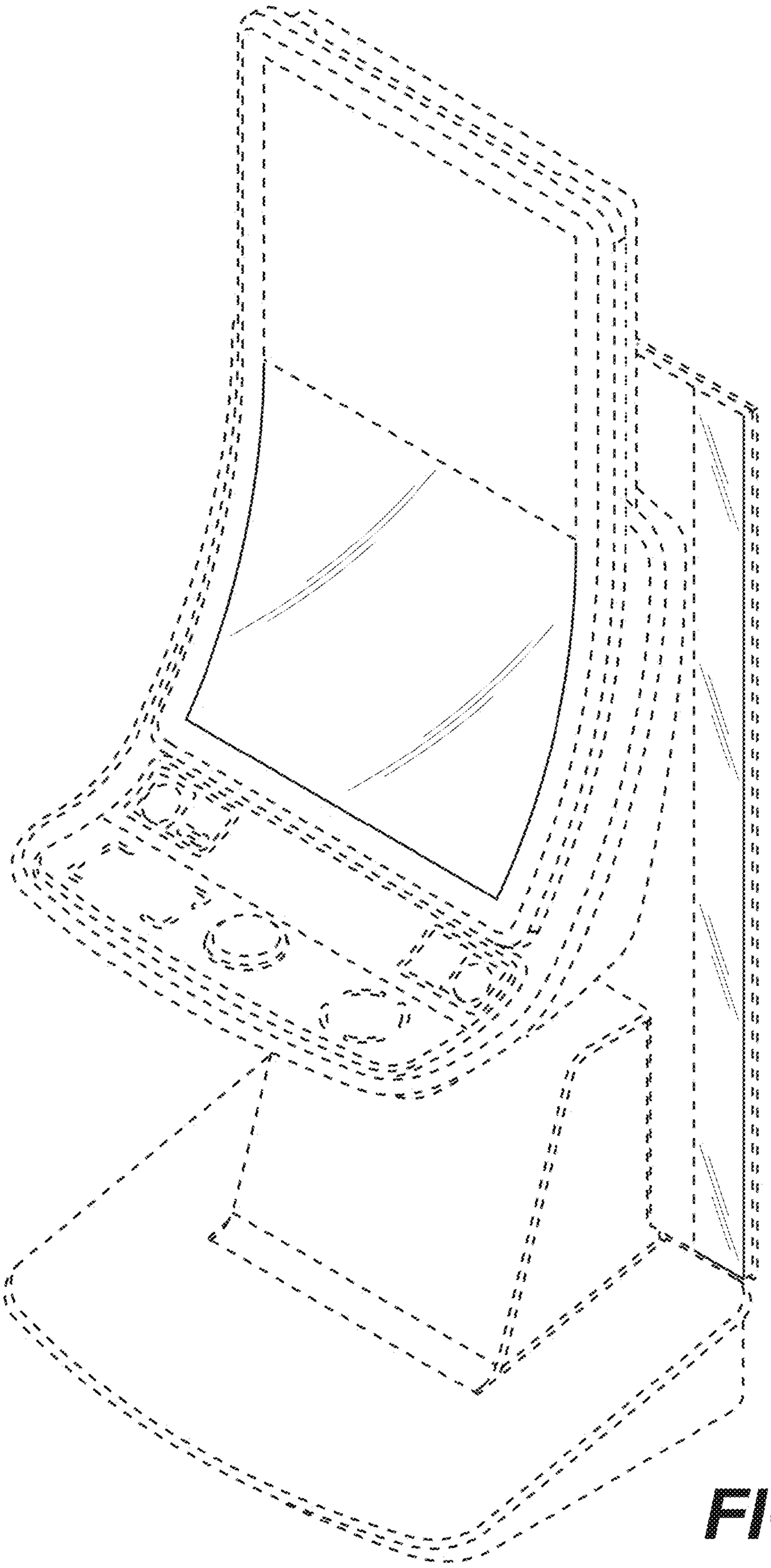


FIG. 1

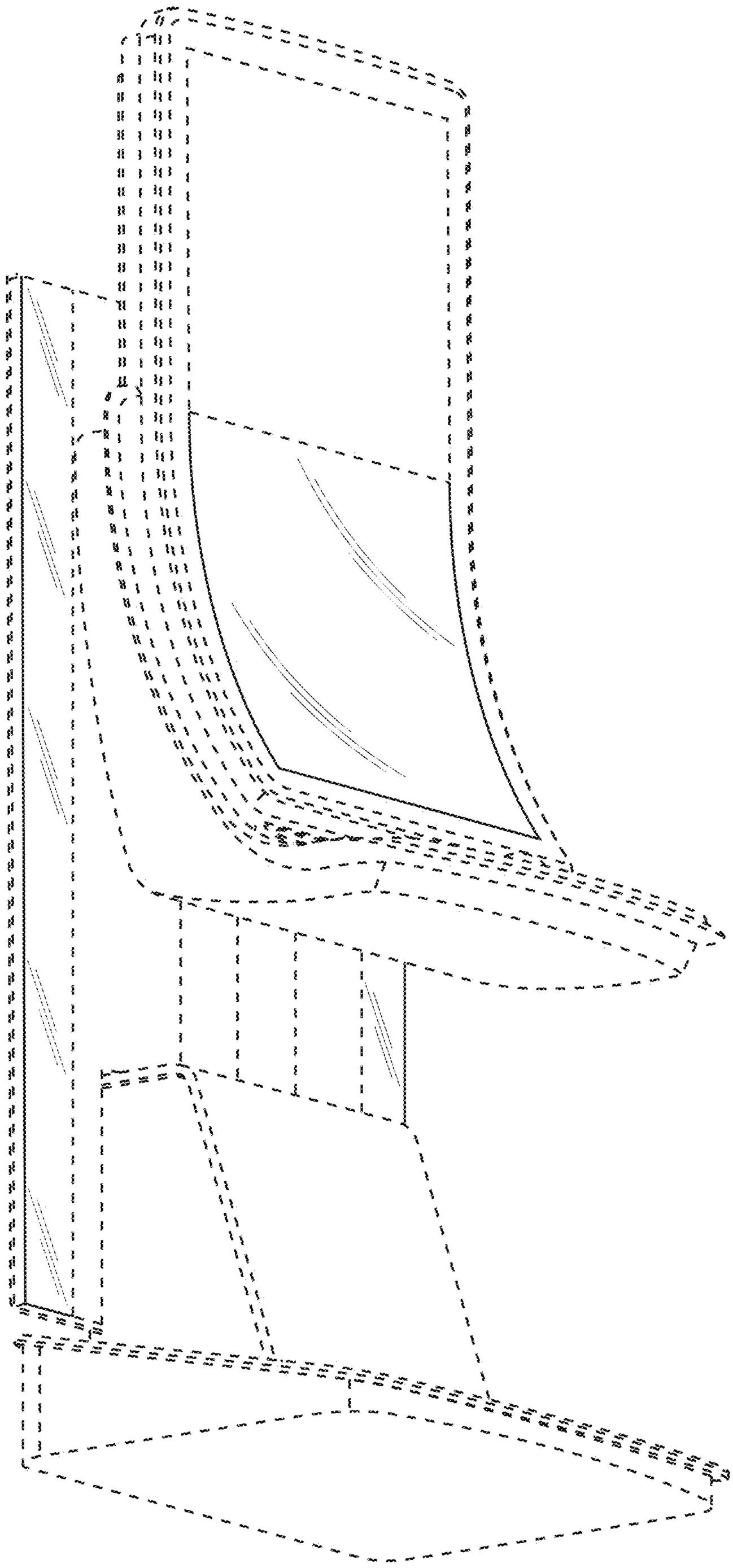


FIG. 2

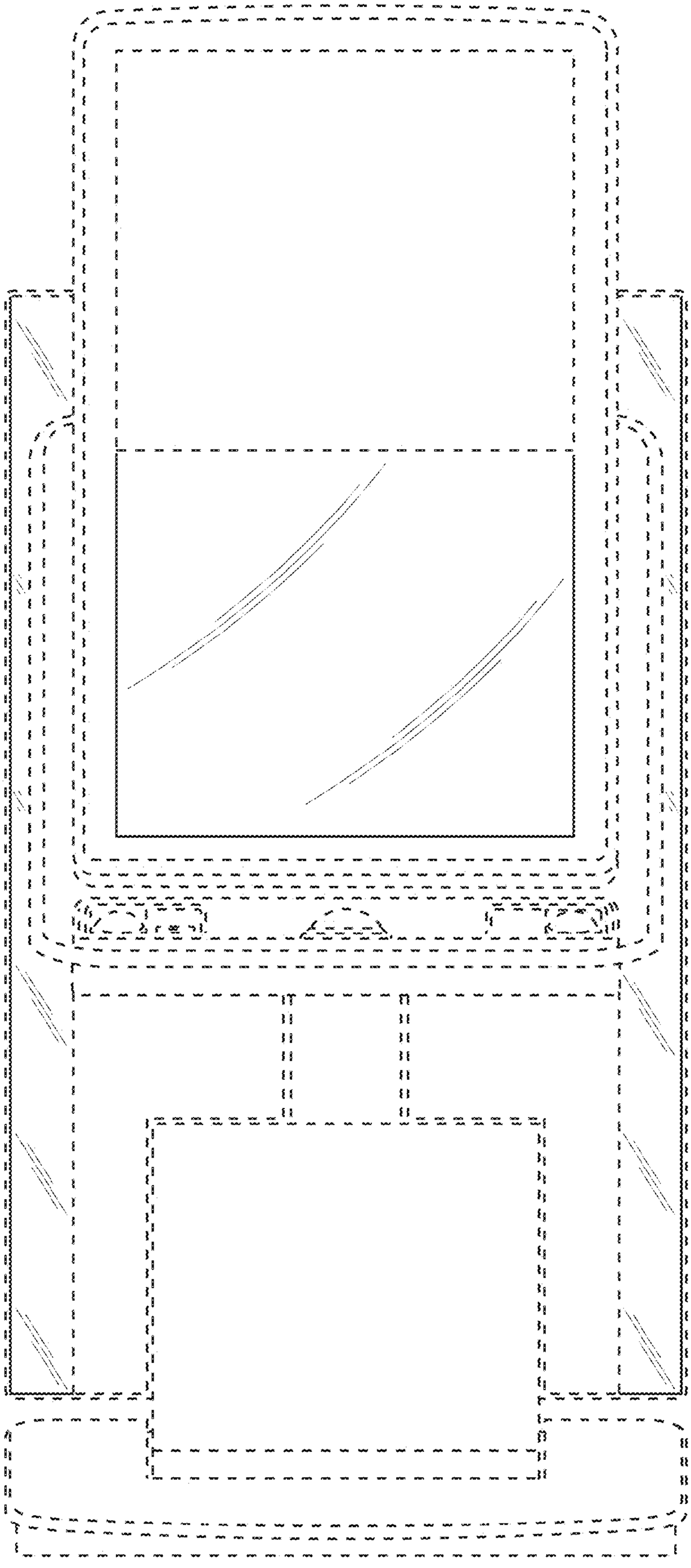


FIG. 3

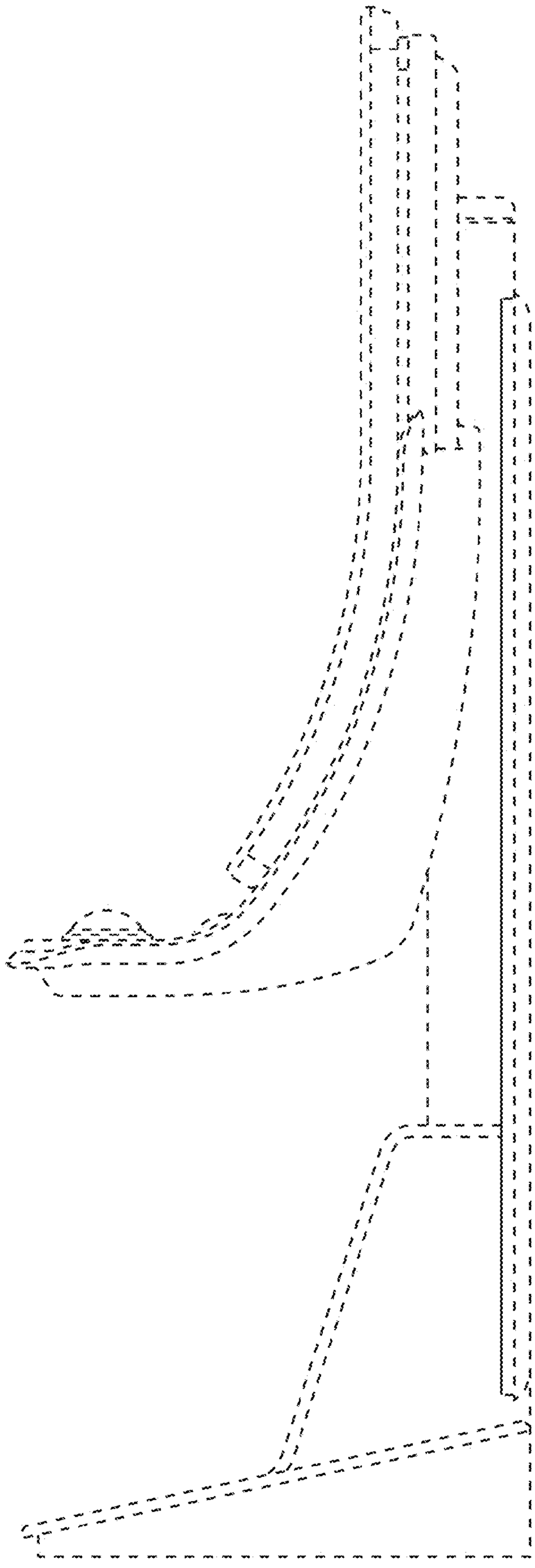


FIG. 4

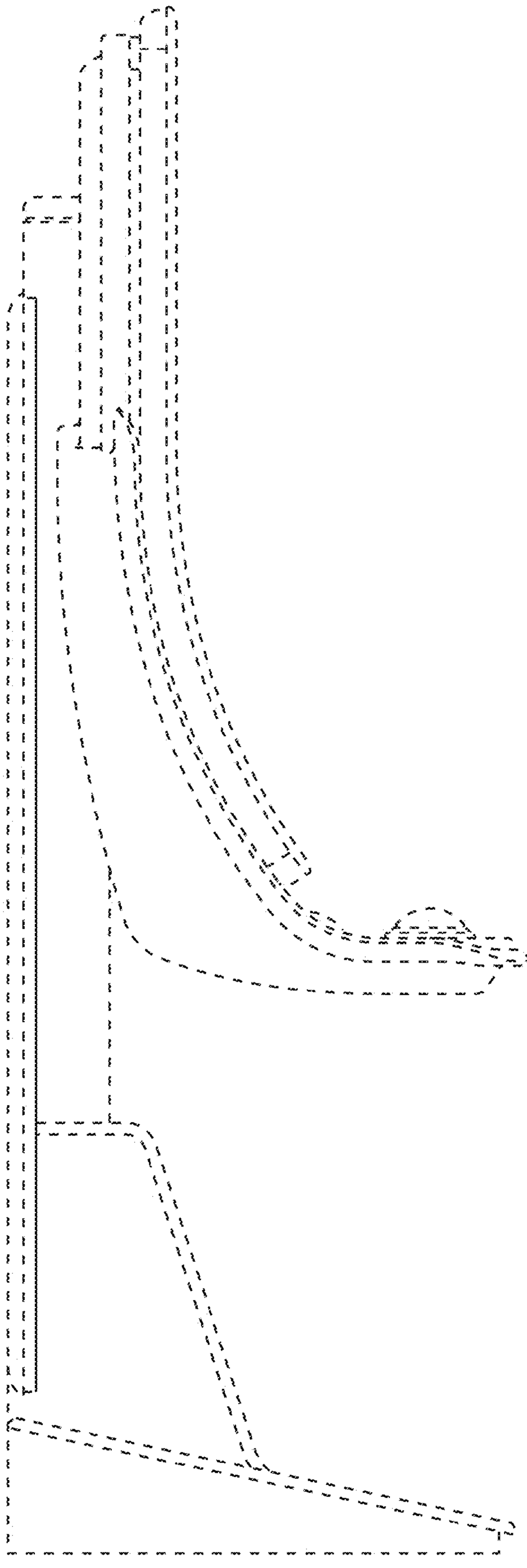


FIG. 5

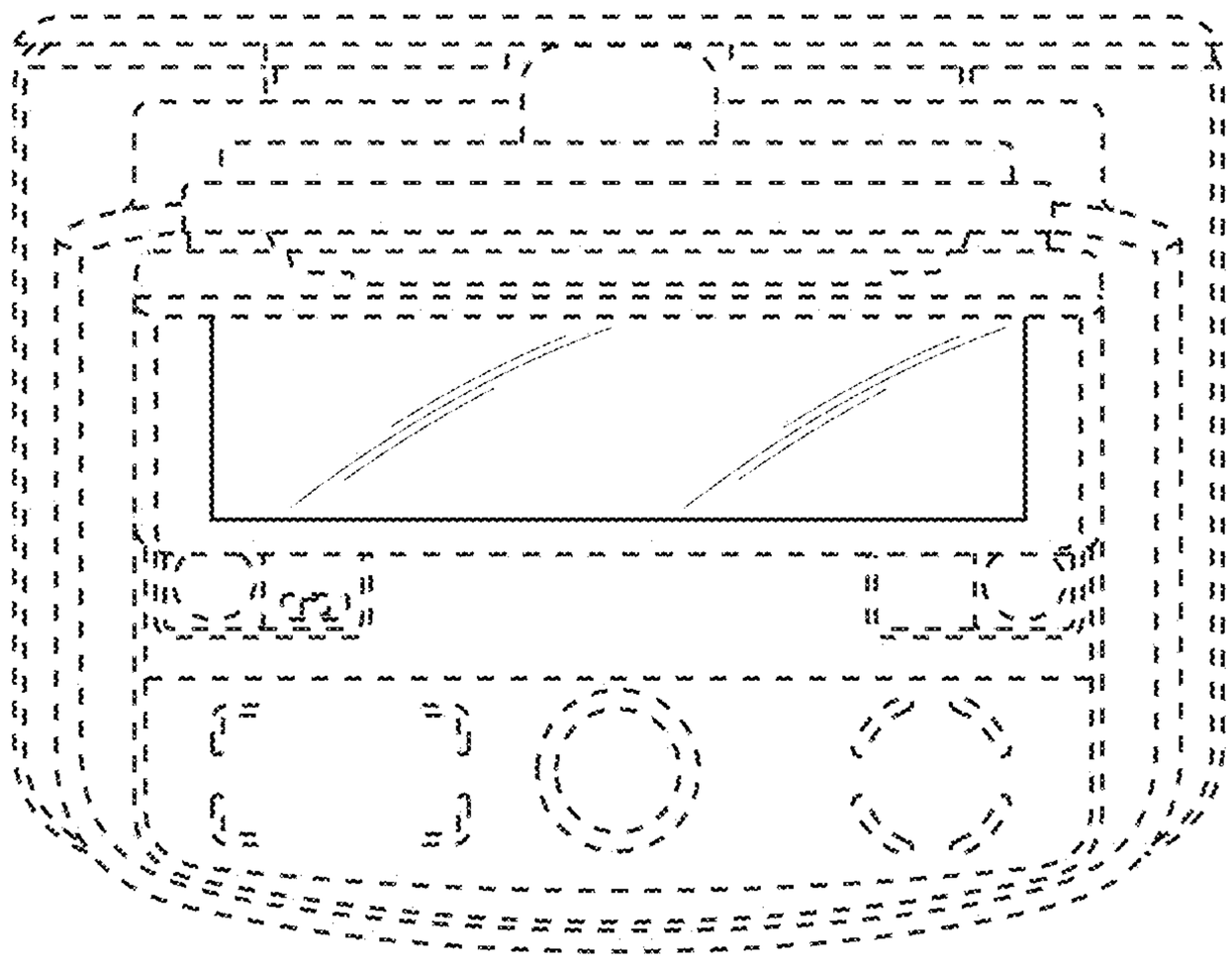


FIG. 6